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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,570	12/12/2000	Raymond Lin	AGIL-0200	5738

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EXAMINER

PATEL, ASHOKKUMAR B

ART UNIT	PAPER NUMBER
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2154

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DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/735,570

Applicant(s)

LIN ET AL.

Examiner

Ashok B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Application Number 09/735,570 was filed on 12/12/2000. Claims 1-22 are subject to examination.

Specification

2. Claim 22 is objected to because of the following informalities: This claim is presented as the dependent claim of claim 20. The claim 20 is not indicated in the specification and it is missing. However, the claim 22 is prosecuted as being the independent claim for the purpose of this office action. Appropriate correction is required.

3. Claims 18 and 21 are objected because they are found to be identical. For the purpose of this office action they are being addressed as they are presented. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Devine et al. (hereinafter Devine)(US 6, 598, 167).

Referring to claims 1 and 2,

The reference Devine teaches a system for facilitating communication between a web browser and an application server via an intermediate webserver, comprising: a webserver configured to communicate with a network, the webserver having an application server interface for communicating with an application server and a network interface for communicating with entities via a network; (Fig. 4, element 23) and a state server configured to store data related to communication sessions occurring among a web browser, a webserver and an application server, the state server including a communication interface configured to communicate with the webserver; (Fig. 4, element 32, cookie jar server associated with the interface 23). The reference also teaches an application server interface configured to communicate with an application server, the application interface including a mechanism for receiving a signal from an application server indicating an authorization to communicate with the application server, wherein the application server interface is configured to communicate with an application server only when a signal is received by the webserver that authorizes such communication. (col. 8, lines 61-67 and col. 9, lines 1-37).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devine et al. (hereinafter Devine)(US 6, 598, 167) in view of Okanoya et al. (hereinafter Okanoya) (US 6, 128, 657)

Referring to claims 3, 4, 5, 6 and 7,

Keeping in mind the teachings of reference Devine as stated above, although the reference teaches the application server interface 23 associated with the monitoring mechanism (cookie jar server, Fig. 4, element 32), the reference fails to teach the inclusion of such a monitoring mechanism in the application server interface. The reference Okanoya teaches network-based load sharing system which operates with high reliability and optimized utilization of resources (col. 2, lines 31-34). The reference Okanoya also teaches the state management agents located in the two servers that periodically exchange messages for monitoring each other. (Fig. 28, col. 18, lines 55-67 and col. 19, lines 1-11). The reference also teaches the detailed monitoring and communication capability of the state management agent in Fig. 31(col.20, lines 39-51). (wherein the application server interface includes a monitoring mechanism for monitoring the activity of the application server during a session with a browser., wherein the application server interface includes a monitoring thread from for facilitating the monitoring by the webserver of the activity of the application server during a session with a browser., wherein the application server interface is further configured to receive a monitoring thread from an application server so that the web server can monitor the activities of a application server during a session between the application server and a browser. , wherein the application server interface is further configured with a

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monitoring mechanism that allows an application server to monitor the activities of a webserver during a session between the application server and a browser., wherein the application server interface is further configured to receive a monitoring thread from an application server so that an application server can monitor the activities of a webserver during a session between the application server and a browser.) These teachings of the concept by reference Okanoya wherein one server can monitor the health of the other server is of a paramount importance and can be applied anywhere where the monitoring of one server by another has implications such as security and load sharing. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Devine's interfaces, such as interfaces 23 and 27, by including the Okanoya's state management agents in the web servers' and application servers' interfaces such that the servers are monitoring each other for each other's activities and the session information can be stored in the state server database such as cookie jar server database for each sessions.

Referring to claims 8, 9 and 10,

Keeping in mind the teachings of reference Devine as stated above, the reference also teaches, once the communication session is on, the cookie jar, the state server, can be made shared between the multiple physical servers in case of a failure of one server. This mechanism prevents sessions being dropped on a server failure (col. 21, lines 8-15). Although the reference teaches the application server interface 23 associated with the monitoring mechanism (cookie jar server, Fig. 4, element 32), the reference fails to teach the inclusion of such a mechanism in the application server interface. The

reference Okanoya teaches network-based load sharing system which operates with high reliability and optimized utilization of resources (col. 2, lines 31-34). The reference Okanoya also teaches the state management agents located in the two servers that periodically exchange messages for monitoring each other. The reference also teaches that in the event of the failure of one server, the state management agent in the other server will learn that failure from the absence of messages from the server one. (Fig. 28, col. 18, lines 55-67 and col. 19, lines 1-11). (wherein the second webserver is further configured to take over a session occurring between the application server and a browser being monitored by the other webserver in the event the other webserver stops monitoring the session., wherein the second webserver is configured to take over a session occurring between the application server and a browser being monitored by the other webserver, wherein the application server interface includes a monitoring mechanism that is configured to engage the second webserver to monitor the session between the application server and the browser after the application server sends a signal in the event the other webserver stops monitoring the session., wherein the second webserver is configured to take over a session occurring between the application server and a browser being monitored by the other webserver, wherein the application server interface includes a monitoring mechanism that is configured to engage the second webserver to monitor the session between the application server and the browser only after the application server sends a signal in the event the other webserver stops monitoring the session.) The reference also teaches the detailed monitoring and communication capability of the state management agent in Fig.

31(col.20, lines 39-51). These teachings of the concept by reference Okanoya wherein one server can monitor the health of the other server is of a paramount importance and can be applied anywhere where the monitoring of one server by another has implications such as security and load sharing. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance to enhance Devine's interfaces, such as interfaces 23 and 27, by including the Okanoya's state management agents in the web servers' and application servers' interfaces such that the servers are monitoring each other for each other's activities and the session information can be stored in the state server database such as cookie jar server database for each sessions and, in case of a failure of one server, the other server picks up the session as jointly taught by Devine and Okanoya.

Referring to claim 11,

The reference Devine teaches a system for communicating among a plurality of network servers communicating with a plurality of computers, comprising: a plurality of webserver communicating with and configured to receive a request from a web browser and to screen and route the browser request to an application server upon the receipt of a signal from the application server; an application server interface configured to control communication between the plurality of webserver and an application server; (Fig. 4, elements 24, col. 8, lines 61-67 and col. 9, lines 1-19). And a state server configured to store data related to communication sessions occurring among a web browser, a webserver and an application server, (Fig. 4, element 32). The reference also teaches, once the communication session is on, the cookie jar, the state server,

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can be made shared between the multiple physical servers in case of a failure of one server. This mechanism prevents sessions being dropped on a server failure (col. 21, lines 8-15). Although the reference teaches the application server interface 23 associated with the monitoring mechanism (cookie jar server, Fig. 4, element 32), the reference fails to teach the inclusion of such a mechanism in the application server interface. The reference Okanoya teaches network-based load sharing system which operates with high reliability and optimized utilization of resources (col. 2, lines 31-34). The reference Okanoya also teaches the state management agents located in the two servers that periodically exchange messages for monitoring each other. The reference also teaches that in the event of the failure of one server, the state management agent in the other server will learn that failure from the absence of messages from the server one. (Fig. 28, col. 18, lines 55-67 and col. 19, lines 1-11). The reference also teaches the detailed monitoring and communication capability of the state management agent in Fig. 31(col.20, lines 39-51). These teachings of the concept by reference Okanoya wherein one server can monitor the health of the other server is of a paramount importance and can be applied anywhere where the monitoring of one server by another has implications such as security and load sharing. (wherein a first webserver is configured to retrieve information related to a session between a web browser and an application server and being monitored by a second webserver in the event that the second webserver terminates its monitoring of the session.) Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance to enhance Devine's interfaces, such as interfaces 23 and 27, by including the

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Okanoya's state management agents in the web servers and application servers interfaces such that the servers are monitoring each other for each other's activities and the session information can be stored in the state server database such as cookie jar server database for each sessions and, in case of a failure of one server, the other server picks up the session as jointly taught by Devine and Okanoya.

Referring to claim 12,

The reference Devine teaches the claimed element (Fig. 4, element 32)(a database communicating with the state server and configured to store session information.).

Referring to claim 13,

The reference Devine teaches the claimed element (col. 8, lines 61-67 and col. 9, lines 1-37)(wherein the webserver is configured to route a browser request to an application server only upon the receipt of a signal from the application server.).

Referring to claim 14,

The reference Devine teaches the claimed element (Fig.4, element 45)(a load balancing device configured to receive browser requests sent from computers communicating with the network system and to direct the requests among the plurality of webservers.).

Referring to claim 15,

The reference Devine teaches a method of facilitating communication between a web browser and an application server, comprising: receiving a request for access to an application server; receiving the request by a first webserver; screening the request for determining authority to access the application server; receiving a signal from the application server indicating that it is ready to receive a browser request;(Fig. 4,

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elements 24, col. 8, lines 61-67 and col. 9, lines 1-19). The reference fails to teach the communicating with the application server to create a monitoring thread between the webserver and the application server; and facilitating communication between the browser and the application server with the webserver. The reference Okanoya teaches network-based load sharing system which operates with high reliability and optimized utilization of resources (col. 2, lines 31-34). The reference Okanoya also teaches the state management agents located in the two servers that periodically exchange messages for monitoring each other. The reference also teaches that in the event of the failure of one server, the state management agent in the other server will learn that failure from the absence of messages from the server one. (Fig. 28, col. 18, lines 55-67 and col. 19, lines 1-11). The reference also teaches the detailed monitoring and communication capability of the state management agent in Fig. 31(col.20, lines 39-51). These teachings of the concept by reference Okanoya wherein one server can monitor the health of the other server is of a paramount importance and can be applied anywhere where the monitoring of one server by another has implications such as security and load sharing. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance to enhance Devine's interfaces, such as interfaces 23 and 27, by including the Okanoya's state management agents in the web servers and application servers interfaces such that the servers are monitoring each other for each other's activities and the session information can be stored in the state server database such as cookie jar server database for each

sessions and, in case of a failure of one server, the other server picks up the session as jointly taught by Devine and Okanoya.

Referring to claim 16,

The reference Devine teaches the claimed invention. (Fig. 4, element 32, col.8, lines 31-60). (communicating with a state server to create a monitoring mechanism between the webserver and the state server to monitor communications between a web browser and an application server and to store information related to such communications.)

Referring to claims 17, 18, 19 and 21,

The reference Devine teaches a method, further comprising: routing the incoming browser request to one of a plurality of webserver; receiving the request by a first webserver; and transferring identification information related to other webserver to the application server. (Fig. 4, elements 45, 24 and elements 41-46). The reference also teaches wherein the step of facilitating communication between the application server and the webserver includes facilitating a session of communication between the application server and the webserver and wherein facilitating communication between the browser and the application server with the webserver is done in response to receiving a signal from the application server indicating that it is ready to receive a browser request. (col. 8, lines 61-67 and col. 9, lines 1-19).

Referring to claim 22,

The reference Devine teaches a method comprising: routing the incoming browser request to one of a plurality of webserver; receiving the request by a first webserver; communicating with a state server to create a monitoring thread between the first

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webserver and the state server so that the state server can monitor communications between the web browser, the first webserver and the application server; transferring identification information related to other webserver to the application server; (Fig. 4, elements 45, 24 and elements 41-46, col. 8, lines 61-67 and col. 9, lines 1-19). The reference also teaches a state server configured to store data related to communication sessions occurring among a web browser, a webserver and an application server, (Fig. 4, element 32). The reference also teaches, once the communication session is on, the cookie jar, the state server, can be made shared between the multiple physical servers in case of a failure of one server. This mechanism prevents sessions being dropped on a server failure (col. 21, lines 8-15). Although the reference teaches the application server interface 23 associated with the monitoring mechanism (cookie jar server, Fig. 4, element 32), the reference fails to teach the inclusion of such a mechanism in the server interfaces. The reference Okanoya teaches network-based load sharing system which operates with high reliability and optimized utilization of resources (col. 2, lines 31-34). The reference Okanoya also teaches the state management agents located in the two servers that periodically exchange messages for monitoring each other. The reference also teaches that in the event of the failure of one server, the state management agent in the other server will learn that failure from the absence of messages from the server one. (Fig. 28, col. 18, lines 55-67 and col. 19, lines 1-11). The reference also teaches the detailed monitoring and communication capability of the state management agent in Fig. 31(col.20, lines 39-51). These teachings of the concept by reference Okanoya wherein one server can monitor the health of the other server is of a paramount

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importance and can be applied anywhere where the monitoring of one server by another has implications such as security and load sharing. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Devine's interfaces, such as interfaces 23 and 27, by including the Okanoya's state management agents in the web servers' and application servers' interfaces such that the servers are monitoring each other for each other's activities and the session information can be stored in the state server database such as cookie jar server database for each sessions and, in case of a failure of one server, the other server picks up the session as jointly taught by Devine and Okanoya .(receiving a monitoring signal from the application server; receiving a signal from the application server indicating that a webserver has terminated the monitoring of the session; receiving a signal at a second webserver from the application server indicating a desire to reconnect to another webserver, wherein signal includes identification information of the second webserver; transferring session data from the state server to the second webserver; communicating with a state server to create a monitoring thread between the second webserver and the state server so that the state server can monitor communications between the web browser, the first webserver and the application server; facilitating a continuing session between the application server and the web browser.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (703) 305-2655. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp


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PRIMARY EXAMINER